

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. *(currently amended)* A compound comprising:

- (a) one or more MHC class I $\alpha 3$ complexes; and
- (b) an antibody or a fragment thereof which binds ~~specific for~~ a cell surface marker;

wherein said MHC class I $\alpha 3$ complexes comprise an isolated MHC class I $\alpha 3$ domain or fragment thereof which binds to a β_2 -microglobulin, a β_2 -microglobulin molecule or fragment thereof which associates with a MHC class I $\alpha 3$ domain, and an antigenic peptide; and

wherein said MHC class I $\alpha 3$ complexes are linked to said antibody or fragment thereof.

2. *(original)* The compound of claim 1, wherein said antigenic peptide is linked to said β_2 -microglobulin molecule or fragment thereof.

3. *(original)* The compound of claim 2, wherein said antigenic peptide is covalently bound to said β_2 -microglobulin molecule or fragment thereof.

4. *(original)* The compound of claim 1, wherein said β_2 -microglobulin molecule or fragment thereof has been modified to have enhanced affinity for the intact MHC class I α chain relative to the isolated MHC class I $\alpha 3$ domain or fragment thereof.

5. (*original*) The compound of claim 4, wherein said β_2 -microglobulin molecule or fragment thereof has a serine to valine mutation at amino acid 55 of the mature protein.

6. (*withdrawn*) The compound of claim 1, wherein said cell surface marker is a cell surface marker of a professional antigen presenting cell.

7. (*withdrawn*) The compound of claim 6, wherein said professional antigen presenting cell is a dendritic cell.

8. (*withdrawn*) The compound of claim 7, wherein said cell surface marker is selected from the group consisting of CD83, CMRF-44, CMRF-56, BCDA-2, BCDA-3, BCDA-4, and DEC-205.

9. (*original*) The compound of claim 1, wherein said cell surface marker is a cell surface marker of a tumor cell.

10. (*withdrawn*) The compound of claim 1, wherein said cell surface marker is a cell surface marker of an epithelial cell.

11. (*withdrawn*) The compound of claim 1, wherein said cell surface marker is a cell surface marker of a fibroblast.

12. (*withdrawn*) The compound of claim 1, wherein said cell surface marker is a cell surface marker of a T cell.

13. (*withdrawn*) The compound of claim 12, wherein said cell surface marker is selected from the group consisting of CD28, CTLA-4 and CD25.

14. (*withdrawn*) The compound of claim 1, wherein said cell surface marker is a cell surface marker of an infected cell.

15. *(withdrawn)* The compound of claim 1, wherein said antigenic peptide is derived from a cancer cell.

16. *(original)* The compound of claim 1, wherein said antigenic peptide is derived from an infectious agent or from infected cells.

17. *(withdrawn)* The compound of claim 1, wherein said antigenic peptide is derived from the target tissue of an autoimmune disease.

18. *(withdrawn)* The compound of claim 9, wherein said antigenic peptide is derived from a cancer cell.

19. *(original)* The compound of claim 1, wherein said isolated MHC class I $\alpha 3$ domain or fragment thereof is linked to a carboxyl terminus of said antibody or fragment thereof.

20. *(withdrawn)* A compound comprising:

- (a) one or more MHC class I $\alpha 3$ complexes; and
- (b) an antibody or a fragment thereof specific for a cell surface marker;

wherein said MHC class I $\alpha 3$ complexes comprise one or more isolated MHC class I $\alpha 3$ domains or fragments thereof, a β_2 -microglobulin molecule or fragment thereof, and a costimulatory molecule; and

wherein said MHC class I $\alpha 3$ complexes are linked to said antibody or fragment thereof.

21. *(withdrawn)* The compound of claim 20, wherein said costimulatory molecule is linked to said β_2 -microglobulin molecule or fragment thereof.

22. (*withdrawn*) The compound of claim 21, wherein said costimulatory molecule is covalently bound to said β_2 -microglobulin molecule or fragment thereof.

23. (*withdrawn*) The compound of claim 20, wherein said β_2 -microglobulin molecule or fragment thereof has been modified to have enhanced affinity for the intact MHC class I α chain relative to the isolated MHC class I $\alpha 3$ domain thereof.

24. (*withdrawn*) The compound of claim 20, wherein said β_2 -microglobulin molecule or fragment thereof has a serine to valine mutation at amino acid 55 of the mature protein.

25. (*withdrawn*) The compound of claim 20, wherein said cell surface marker is a cell surface marker of a professional antigen presenting cell.

26. (*withdrawn*) The compound of claim 25, wherein said professional antigen presenting cell is a dendritic cell.

27. (*withdrawn*) The compound of claim 26, wherein said cell surface marker is selected from the group consisting of CD83, CMRF-44, CMRF-56, BCDA-2, BCDA-3, BCDA-4, and DEC-205.

28. (*withdrawn*) The compound of claim 20, wherein said cell surface marker is a cell surface marker of a tumor cell.

29. (*withdrawn*) The compound of claim 20, wherein said cell surface marker is a cell surface marker of an epithelial cell.

30. (*withdrawn*) The compound of claim 20, wherein said cell surface marker is a cell surface marker of a fibroblast.

31. (*withdrawn*) The compound of claim 20, wherein said cell surface marker is a cell surface marker of a T cell.

32. (*withdrawn*) The compound of claim 31, wherein said cell surface marker is selected from the group consisting of CD28, CTLA-4 and CD25.

33. (*withdrawn*) The compound of claim 20, wherein said cell surface marker is a cell surface marker of an infected cell.

34. (*withdrawn*) The compound of claim 20, wherein said costimulatory molecule is selected from the group consisting of B7.1 and B7.2.

35. (*withdrawn*) The compound of claim 20, wherein said isolated MHC class I $\alpha 3$ domain or fragment thereof is linked to the carboxyl terminus of said antibody or fragment thereof.

36. (*withdrawn*) A compound comprising:

- (a) two or more MHC class I $\alpha 3$ complexes;
- (b) a multivalent compound; and
- (c) an antibody or a fragment thereof specific for a cell surface marker;

wherein said MHC class I $\alpha 3$ complexes comprise one or more isolated MHC class I $\alpha 3$ domains or fragment thereof, one or more β_2 -microglobulins or fragment thereof, and one or more molecules selected from the group consisting of antigenic peptides, costimulatory molecules, and cytokines;

wherein said MHC class I $\alpha 3$ complexes are linked to said multivalent compound; and wherein said multivalent compound is linked to said antibody.

37. (*withdrawn*) The compound of claim 36, wherein said one or more molecules are linked to said β_2 -microglobulin or fragment thereof.

38. (*withdrawn*) The compound of claim 37, wherein said one or more molecules are covalently bound to said β_2 -microglobulin or fragment thereof.

39. (*withdrawn*) The compound of claim 36, wherein said β_2 -microglobulin molecule or fragment thereof has been modified to have enhanced affinity for the intact MHC class I α chain relative to the isolated MHC class I $\alpha 3$ domain thereof.

40. (*withdrawn*) The compound of claim 36, wherein said β_2 -microglobulin or fragment thereof has a serine to valine mutation at amino acid 55 of the mature protein.

41. (*withdrawn*) The compound of claim 36, wherein said cell surface marker is a cell surface marker of a professional antigen presenting cell.

42. (*withdrawn*) The compound of claim 41, wherein said professional antigen presenting cell is a dendritic cell.

43. (*withdrawn*) The compound of claim 42, wherein said cell surface marker is selected from the group consisting of CD83, CMRF-44, CMRF-56, BCDA-2, BCDA-3, BCDA-4, and DEC-205.

44. (*withdrawn*) The compound of claim 36, wherein said cell surface marker is a cell surface marker of a tumor cell.

45. (*withdrawn*) The compound of claim 36, wherein said cell surface marker is a cell surface marker of an epithelial cell.

46. (*withdrawn*) The compound of claim 36, wherein said cell surface marker is a cell surface marker of a fibroblast.

47. (*withdrawn*) The compound of claim 36, wherein said cell surface marker is a cell surface marker of a T cell.

48. (*withdrawn*) The compound of claim 47, wherein said cell surface marker is selected from the group consisting of CD28, CTLA-4 and CD25.

49. (*withdrawn*) The compound of claim 36, wherein said antigenic peptide is derived from a cancer cell.

50. (*withdrawn*) The compound of claim 36, wherein said antigenic peptide is derived from an infectious agent or from infected cells.

51. (*withdrawn*) The compound of claim 36, wherein said antigenic peptide is derived from the target tissue of an autoimmune disease.

52. (*withdrawn*) The compound of claim 36, comprising one or more cytokines selected from the group consisting of B7.1 and B7.2.

53. (*withdrawn*) The compound of claim 36, comprising one or more cytokines selected from the group consisting of: IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IL-16, IL-17, IL-18, α interferons, ω interferon, β interferons, γ interferons, τ interferon, colony stimulating, granulocyte-macrophage colony stimulating factor, transforming growth factor, and insulin-like growth factors.

54. (*withdrawn*) The compound of claim 36, wherein said multivalent compound is avidin.

55. (*withdrawn*) The compound of claim 36, wherein said multivalent compound is selected from the group consisting of streptavidin and chicken avidin.

56. (*withdrawn*) The compound of claim 36, wherein said multivalent compound is a modified GCN4-zipper motif.

57. (*withdrawn*) A polynucleotide encoding a compound comprising:
(a) one or more MHC class I $\alpha 3$ chains; and
(b) an antibody or fragment thereof specific for a cell surface marker;
wherein said MHC class I $\alpha 3$ chains are linked to said antibody or fragment thereof.

58. (*withdrawn*) A method of immunizing an animal, comprising administering to said animal the compound of claim 1.

59. (*withdrawn*) A method of immunizing an animal, comprising administering to said animal the compound of claim 20.

60. (*withdrawn*) A method of immunizing an animal, comprising administering to said animal the compound of claim 36.

61. (*new*) The compound of claim 1, wherein said antibody or fragment thereof is selected from the group consisting of an Fab, F(ab')₂, Fv, scFv, and dAb fragment.